CLAIMS:

1.   A method of controlling traffic on a data network, said traffic comprising payload data and associated signalling data, the method comprising:

reading a portion of said payload data for traffic of a communications session between a first entity and a second entity communicating over said network;

determining whether said portion of payload data identifies a type of traffic to be controlled;

storing signalling data associated with said portion of payload data;

reading signalling data for traffic on said network and comparing said read signalling data with said stored signalling data to identify further traffic of said controlled type; and

controlling said further traffic session responsive to said identification.

2.   A method as claimed in claim 1 wherein said controlling comprises controlling a route of said further or resumed communications session traffic.

3.   A method as claimed in claim 1 or 2 wherein said reading of said communications session traffic includes reading at least a portion of said signalling data for said session traffic, wherein said determining includes determining from said signalling data an address of an originator of said controlled type of traffic, said originator comprising one of said first and second entities, and wherein said signalling comprises sending a signal to said originator using said determined address.

4.   A method as claimed in claim 1, 2 or 3 wherein said signalling comprises signalling with said signalling data.

5.   A method as claimed in claim 1, 2 or 3 wherein said signalling comprises sending a message in said payload data.

6.   A method as claimed in claim 5 wherein said message includes a request to retry establishing said communications session.

7.   A method as claimed in any preceding claim wherein said storing is responsive to said determining.

8.   A method as claimed in any preceding claim wherein said communications session traffic reading comprises reading first payload data for a communication from said first to said second entity and second payload data for a communication from said second to said first entity, and wherein said determining whether said payload data identifies a controlled type of traffic determines whether both said said first and second payload data are of said controlled traffic type.

9.   A method as claimed in claim 8 further comprising buffering said first and second payload data for said determining.

10.   A method as claimed in any preceding claim wherein said determining comprises comparing said payload data with a signature of said controlled type of traffic.

11.   A method as claimed in any preceding claim further comprising signalling, responsive to said determining, to at least one of said first and second entities to interrupt said communications session.

12.   A method as claimed in any preceding claim wherein said further traffic comprises an attempt to begin a further communications session of said controlled traffic type or to resume said communications session, and wherein said controlling comprises controlling traffic of said further or resumed communications session.

13.   A method as claimed in any preceding claim wherein said network comprises a packet data network and wherein said signalling data includes a destination identifier.

14.   A method as claimed in claim 13 wherein said network comprises an internet protocol (IP) network, in particular a transmission control protocol (TCP) IP network, and wherein said signalling data includes a destination address and port number.

15.　　A method as claimed in any preceding claim wherein said type of traffic to be controlled includes peer-to-peer protocol network traffic.

16.　　A method as claimed in claim 15 wherein said controlling comprises routing said peer-to-peer traffic to a peer-to-peer network gateway.

17.　　A method as claimed in claim 15 wherein said controlling comprises routing said peer-to-peer traffic to a peer-to-peer network cache.

18.　　Processor control code to, when running, control traffic on a data network, said traffic comprising payload data and associated signalling data, the code comprising:

code to read a portion of said payload data for traffic of a communications session between a first entity and a second entity communicating over said network;

code to determine whether said portion of payload data identifies a type of traffic to be controlled;

code to store signalling data associated with said portion of payload data;

code to read signalling data for traffic on said network and to compare said read signalling data with said stored signalling data to identify an attempt to begin a further communications session of said identified traffic type or to resume said communications session; and

code to control traffic of said further or resumed communications session responsive to said identification.

19.　　A carrier medium carrying the processor control code of claim 18.

20.　　A router for controlling traffic on a data network, said traffic comprising payload data and associated signalling data, the router comprising:

a network interface for interfacing with said data network;

a data memory operable to store data to be processed;

an instruction memory storing processor implementable code; and

a processor coupled to said network interface, to said data memory, and to said instruction memory and operable to process said data in accordance with code stored in said instruction memory, said stored code comprising:

code to read a portion of said payload data for traffic of a communications session between a first entity and a second entity communicating over said network;

code to determine whether said portion of payload data identifies a type of traffic to be controlled;

code to store signalling data associated with said portion of payload data;

code to read signalling data for traffic on said network and to compare said read signalling data with said stored signalling data to identify an attempt to begin a further communications session of said identified traffic type or to resume said communications session; and

code to control traffic of said further or resumed communications session responsive to said identification.

21.   A router as claimed in claim 20 wherein network comprises a packet data network, wherein said signalling data comprises a destination identifier to identify a destination of a packet of data comprising said traffic, and wherein said storing stores a destination identifier for traffic of said controlled type in said data memory responsive to identifying said controlled type of traffic.

22.   A router as claimed in claim 21 wherein said code further comprises code to store portions of said payload data of said communications session sent from both said first and said second entity; and wherein said code to determine whether said payload data identifies traffic of said controlled type is configured to determine when communications from both said first and second entities are of a said controlled type.

23.   A carrier medium carrying computer readable code for a router for routing peer-to-peer traffic on an internet protocol (IP) packet data network, the router having a data table identifying peer-to-peer sockets, the code comprising code to:

read payload data of a packet of data traffic;

determine whether said payload data relates to a peer-to-peer protocol;

write socket data for said payload data into said table responsive to said determining; and

route packets of data traffic on said network responsive to said socket data in said data table.

24. A carrier medium as claimed in claim 23 wherein said code further comprises code to cause closure of at least one end of a connection used for communicating said payload data.

25. A router including a processor and the carrier medium of claims 19, 23 or 24.